Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (original) A method of tuning an oscillator of a receiver, comprising:

receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;

comparing the frequency of the desired received signal to a threshold frequency;

tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively.

2. (previously presented) A method of tuning an oscillator of a receiver, comprising:

receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;

comparing the frequency of the desired received signal to a threshold frequency;

tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,

further comprising converting the desired received signal frequency to an index value of a set of index values, the set of index values corresponding to a set of channels in said predetermined range of reception frequencies.

3. (previously presented) A method of tuning an oscillator of a receiver, comprising:

receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;

comparing the frequency of the desired received signal to a threshold frequency;

tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,

further comprising representing the threshold frequency as an index value of a set of index values, the set of index values uniquely corresponding to a set of channels in said predetermined range of reception frequencies.

4. (original) The method of claim 1 wherein tuning the oscillator further comprises applying one of at least two frequency offsets to the received frequency that is added when the received frequency is greater than and less than the threshold frequency, respectively.

5. (original) The method of claim 4 wherein the first and second offsets have the same magnitude.

6. (original) The method of claim 5 wherein the range of frequencies is bounded by high and low frequencies F_{HIGH} and F_{LOW}, respectively, the first and second offsets being less than or equal to $(F_{HIGH} - F_{LOW})/2$.

7. (original) The method of claim 5 wherein the first and second frequency offsets are equal to an intermediate frequency of the receiver.

8. (previously presented) A method of tuning an oscillator of a receiver, comprising:

receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;

comparing the frequency of the desired received signal to a threshold frequency;

tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,

wherein the range of frequencies is bounded by high and low frequencies F_{HIGH} and F_{LOW}, respectively, the threshold frequency approximately equalling $F_{LOW} + (F_{HIGH} - F_{LOW})/2$.

9. (previously presented) A method of tuning an oscillator of a receiver, comprising:

receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;

comparing the frequency of the desired received signal to a threshold frequency;

tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,

wherein the range of frequencies is 2400 MHz to 2485 MHz inclusive.

10. (original) An electromagnetic signal receiver constructed and arranged to receive signals within a predetermined frequency range and having a predetermined intermediate frequency comprising:

a local oscillator,

a source of a signal representative of the frequency of a desired signal to be received within said predetermined frequency range,

and a frequency controller coupled to said local oscillator and said source of a signal for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from the frequency of said desired signal by said intermediate frequency and is within said predetermined frequency range.

11. (currently amended) A receiver comprising:

a signal path for conducting a received electrical signal of reception frequency within a predetermined range of frequencies;

a local oscillator for providing a local oscillator signal,

a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency signal of predetermined intermediate frequency,

and a frequency controller coupled to said local oscillator and said signal path for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from that of a received signal within said predetermined frequency range by said intermediate frequency and is within said predetermined frequency range[[,]].

~~a local oscillator, for providing a local oscillator signal;~~

~~a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency signal of predetermined intermediate frequency.~~

12. (previously presented) The receiver of claim 11 wherein the local oscillator further comprises a phase-locked loop.

13. (previously presented) A receiver, comprising:

a signal path for conducting a received electrical signal of reception frequency within a predetermined range of frequencies;

a local oscillator, for providing a local oscillator signal;

and a frequency controller coupled to said local oscillator and said signal path for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from that of a received signal within said predetermined frequency range by said intermediate frequency and is within said predetermined frequency range.

a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency,

wherein the predetermined frequency range is 2440 MHz to 2485 Mhz inclusive.

14. (currently amended) A receiver, comprising:

a signal path for conducting a received electrical signal of reception frequency within a predetermined range of frequencies;

a local oscillator, for providing a local oscillator signal;

a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency signal of intermediate frequency,

and a frequency controller coupled to said local oscillator and said signal path for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from that of a received signal within said predetermined frequency range by said intermediate frequency and is within said predetermined frequency range,

~~a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency,~~

wherein the frequency controller further comprises a microprocessor.

15. (currently amended) The receiver of claim 14 wherein the microprocessor comprises a computer readable medium containing instructions capable of causing the frequency controller to:

add a first frequency offset value to the local oscillator frequency of magnitude corresponding to said intermediate frequency when the received frequency is greater than a predetermined threshold frequency within said predetermined frequency range; and

add a second frequency offset value ~~of magnitude~~ to the local oscillator frequency of magnitude corresponding to said intermediate frequency when the received frequency is less than said threshold frequency.